In the Claims

Please *cancel* claims 1-9 without prejudice and thereafter *add* the following new claims:

--10. A rear-view mirror with a wide viewing angle and reduced single-image distortion installed on a vehicle, the mirror comprising a monolithic plastic body which is made of transparent plastic material and has a surface that faces objects to be detected which is flat and an opposite reflecting surface which has an aspheric configuration generated by rotation about an axis which is parallel to a centerline axis of the vehicle on which the mirror is installed, of a curve whose design equation is:

$M = 1/[1+(2E/R)]$

wherein M is the angular magnification of a reflected image of the mirror, E is the distance of the eye of a driver from the surface of the mirror that faces objects to be detected, and R is the radius of curvature of the reflecting surface which has a point by point variation over said reflecting surface given by the equation:

$Z=C(X^2+Y^2) / 1+[1-SC^2(X^2+Y^2)]^{1/2} +A(X^2+Y^2)$

wherein X, Y and Z are coordinates of the reflecting surface and C, S and A are parameters representing, respectively, a curvature factor, a shape factor and a correction factor which depend on the distance E and angular magnification M, said distance E and angular magnification M having values set according to design requirements of the vehicle.

11. The mirror of claim 10, wherein said reflecting surface is fully aspheric.

12. The mirror of claim 10, wherein said monolithic body made of transparent material is a cast body made by way of any of a pressure injection-compression and a gravity casting, and wherein said cast body has a low-roughness surface with a perfectly reflective layer deposited thereon, said reflective layer being any of a metallic deposition layer, a film, and a low-thickness panel.

13. The mirror of claim 12, wherein the reflecting layer is any of a coated layer, an in-mold coated layer, an in-mold embedded reflective panel, and an in-mold

embedded film.

14. A mirror as set forth in claim 10 arranged connected externally on a structure of a vehicle.

15. The mirror of claim 10, wherein the flat surface is provided so as to be water-repellent and scratch-resistant.

16. The mirror of claim 10, wherein said mirror is connected externally on the vehicle structure.

17. The mirror of claim 2, wherein said aspheric reflecting surface has a transverse viewing angle of 85°.

18. A rear-view mirror with a wide viewing angle and reduced single-image distortion installed on a vehicle, the mirror comprising a monolithic plastic body which is made of transparent plastic material and has a surface that faces objects to be detected which is flat and an opposite reflecting surface which has an aspheric configuration generated by rotation, about an axis which is perpendicular to a centerline axis of the vehicle on which the mirror is installed, of a curve whose design equation is:

$M = 1/[1+(2E/R)]$

wherein M is the angular magnification of a reflected image of the mirror, E is the distance of the eye of a driver from the surface of the mirror that faces objects to be detected, and R is the radius of curvature of the reflecting surface which has a point by point variation over said reflecting surface given by the equation:

$$Z=C(X^2+Y^2) / 1+[1-SC^2(X^2+Y^2)]^{1/2} +A(X^2+Y^2)$$

wherein X, Y and Z are coordinates of the reflecting surface and C, S and A are parameters representing, respectively, a curvature factor, a shape factor and a correction factor which depend on the distance E and angular magnification M, said distance E and angular magnification M having values set according to design requirements of the vehicle.

19. A rear-view mirror with a wide viewing angle and reduced single-image distortion installed on a vehicle, the mirror comprising a monolithic plastic body which is made of transparent plastic material and has a surface that faces objects to be

detected which is flat and an opposite reflecting surface which has an aspheric configuration with a radius of curvature R having a point by point variation over said reflecting surface, said radius of curvature R depending on an angular magnification M of a reflected image of the mirror and to a distance E of the eye of a driver from the reflecting surface according to a design equation which is given by:

$M = 1/[1+(2E/R)]$

and wherein the point by point variation of the radius of curvature of the reflecting surface R over said reflecting surface is given by the equation:

$Z=C(X^2 + Y^2) / 1+[1-SC^2(X^2 + Y^2)]^{1/2} +A(X^2 + Y^2)$

wherein X, Y and Z are coordinates of the reflecting surface and C, S and A are parameters representing, respectively, a curvature factor, a shape factor and a correction factor which depend on the distance E and angular magnification M, said distance E and angular magnification M having values set according to design requirements of the vehicle.

20. The mirror of claim 19, wherein said body is made of a material selected from a group comprising polycarbonates and polymethylmethacrylates.--